

CALIFORNIA WILDLIFE HABITAT RELATIONSHIPS SYSTEM
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CALIFORNIA INTERAGENCY WILDLIFE TASK GROUP
Database Version 8.1 (2005)

A017 Kern Canyon Slender Salamander *Batrachoseps simatus*
Family: Plethodontidae Order: Caudata Class: Amphibia

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DISTRIBUTION, ABUNDANCE, AND SEASONALITY

This species is uncommon, and is known only from the lower Kern River Canyon in Tulare and Kern cos. Elevation 305 to 1220 m (1000 to 4000 ft). Prefers valley-foothill hardwood, valley-foothill hardwood-conifer, and mixed chaparral habitats.

SPECIFIC HABITAT REQUIREMENTS

Feeding: Forages under or close to surface of objects such as pieces of bark, decaying logs, and flat talus rocks or moist leaf litter, and may enter termite tunnels and earthworm burrows. Related species take small arthropods such as spiders and mites, insects (especially collembolans, coleopterans, and hymenopterans), earthworms and snails (Cunningham 1960, Adams 1968).

Cover: During the moist periods of fall, winter, and spring precipitation, individuals seek cover under surface objects such as logs, boards, moist leaf litter, and rock talus. This species retreats to moist underground niches or seepage areas during drier periods.

Reproduction: Little information on specific habitat requirements for breeding or egg laying. Eggs of similar species are laid underground or on moist substrates under or within surface objects, especially pieces of bark (Stebbins 1972).

Water: No information on water requirements but surface activity is strongly correlated with periods of fall, winter, and spring precipitation.

Pattern: Prefers north-facing slopes in valley-foothill hardwood, valley-foothill hardwood-conifer, and mixed chaparral habitats.

SPECIES LIFE HISTORY

Activity Patterns: Nocturnal surface activity during moist periods (November to May). Retreats underground during dry periods.

Seasonal Movements/Migration: Retreats to subterranean refugia during dry periods.

Home Range: No information; probably small. Area of surface activity probably covers, or is proximal to, the area of underground activity.

Territory: Unknown. Individuals have not been observed to actively defend resources, but females of related species are commonly found in the vicinity of egg clusters.

Reproduction: Probably lays eggs during the rainy period of winter and early spring.

Related forms lay eggs in clusters of 4 to 21 (Stebbins 1954 and references therein).

Niche: A semifossorial species able to enter termite tunnels, earthworm burrows, and other small openings not available to more robust salamanders. Another slender salamander (*Batrachoseps pacificus relictus*) occurs in the same area but is more restricted to stream beds and seepages. May compete for food resources with juvenile salamanders of other species where their ranges overlap. Primary predators are probably small snakes such as the ringneck snake. Adults and juveniles may also be taken by beetle larvae and other predatory arthropods, diurnal birds (especially those that search through leaf litter) and small mammals.

General Comments: This species is not common within its restricted range. Road construction or other human activities within the vicinity of known or probable habitat should be designed to minimize impact.

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